

Bakery Improves Product Quality With Micro Motion® Flowmeters

RESULTS

- Dramatically improved accuracy measurements, resulting in better product quality
- Reduced maintenance costs
- Reduced material waste for \$20,000 annual savings



APPLICATION

In the baking industry, ingredients work together to create the desired structure and texture of quality bakery products. Each component affects the others and, if they are used at improper levels, can destroy product quality.

Baking requires strict compliance to scaling guidelines, production times and temperatures. Professional bakers need to blend the exact quantities of each ingredient under ideal conditions to achieve the highest quality bakery products.

Ideal production conditions and ingredient proportions differ for nearly every bakery item. The application of state-of-the-art technology to the proportioning of ingredients enhances the baker's ability to produce a quality product and reduce material waste.

CHALLENGE

The common methods for measuring liquid sponge in bakeries are positive displacement (PD) meters or load cells. One customer using PD meters was experiencing problems with weight control limits and product quality. These problems existed because this type of meter measures volume. The accuracy of the mass of ingredient deliveries was subject to errors as the density of the liquid sponge changed with changes in the temperature and pressure. The volume measurement was not good enough to ensure consistent batches and a quality product.

Micro Motion meters provide the exacting standards necessary for quality baked goods.

www.micromotion.com



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www.EmersonProcess.com/solutions/food_bev
www.micromotion.com/food



SOLUTION

This customer decided to replace the PD meter with a Micro Motion® Coriolis flowmeter. The accuracy of the old system was estimated at ±5%. Because Micro Motion meters measure mass, the new system delivers accuracy better than 1%. This has resulted in annual savings of over \$20,000 in material loss. In addition, equipment failures have been drastically reduced and many bulky pieces of equipment have been eliminated.

The quality of the product depends on meeting strict production formulas. Any difference in the weight of ingredients dramatically affects product texture, shelf life, color and, more importantly, taste. The addition of the Micro Motion flowmeters dramatically improved product quality and, at the same time, improved the processor's bottom line profits by reducing maintenance and material waste costs.

